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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mika Perala

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466 7590 03/06/2007
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EXAMINER

MOORE, MARGARET G

ART UNIT

PAPER NUMBER

1712

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/019,962	Applicant(s) PERALA ET AL.	
	Examiner Margaret G. Moore	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 to 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19 to 25, 27 to 37, 39 to 43 is/are rejected.
- 7) ☒ Claim(s) 26 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Applicants' amendment filed 12/7/06 has been entered. This amendment canceled all previous claims. As such all the previous rejections are rendered moot. The following new rejections have been made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 24, 30 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 24 and 36, the formula is improper. Note that the middle C atom has a valency of 5.

In claim 30, the breadth of "conventional additives" is unclear. Specifically, what is and is not conventional is not known. This is particularly true since applicants use the term "consisting essentially of" in an effort to limit what can and cannot be in the composition.

4. Claims 19, 27, 30, 31, 39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foscante et al.

Foscante et al. teach an interpenetrating polymer network. This reference was detailed in the previous office action. In a particular embodiment, the composition contains an epoxy resin, a polysiloxane and an epoxysilane. See for instance column 4, lines 25 to 35. Particular attention is directed to the working examples, for instance Example 3A. This differs from that claimed in that 1) the epoxy is aromatic and 2) it contains an aminosilane rather than an epoxysilane. The obviousness of these two differences was addressed in the previous office action.

Specifically, with regard to the epoxy resin, patentees incorporate by reference the teachings of Wagner on column 4. This reference discloses that the epoxy resin can be either aromatic or non-aromatic. As such the obviousness of using a non-aromatic epoxy resin in place of an aromatic epoxy resin would have been obvious.

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With regard to the aminosilane, note that Foscante et al. teach the alternative use of amino and epoxy silanes as a means of obtaining a siloxane backbone. As such this difference is also rendered obvious by the teachings in Foscante et al.

For claims 27 and 39, please see column 6, lines 13 and on.

For claim 31, please see column 7, line 66, which teaches the addition of the pigments.

For claims 30 and 42, please note column 8, lines 38 and on, which teaches a two package system in which a curing agent is present in one package and the epoxy resin, epoxysilane and additives are present in another package. The only difference between this and the claimed kit is that this does not specify where the polysiloxane is. However, since the polysiloxane can be placed in only one of two different packages, the inclusion of it with the epoxy resin and epoxysilane would have been an obvious selection.

Applicants make general remarks regarding the teachings of Foscante et al. in their reply. While these are not specifically drawn to the rejection above, the Examiner will address these remarks as they apply.

First, the fact that Wagner is allegedly from a completely different field makes absolutely no difference since a specific portion of Wagner is incorporated by reference into the body of Foscante et al. This effectively means that the disclosure of Foscante et al. includes this portion.

Applicants' position that the reference is totally silent with respect to the use of the claimed composition in paints resulting in weather resistance is not accurate. Foscante et al. is drawn to coatings (which can be used synonymously with paint, particularly since a pigment is added). Note that this coating has improved solvent, acid and base resistance (column 1, lines 43 to 45), which can correspond to improved weather resistance (for instance when the weather is acid rain or contains other contaminants found in the environment). See also column 10, lines 57 and on.

Also, reliance on the declarations in overcoming this rejection is not sufficient since they do not establish any criticality for the phrase "consisting essentially of" as it would apply to Foscante et al.

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5. Claims 28, 29, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foscante et al. as applied to claims 19 and 31 above, and further in view of Plueddemann.

This rejection relies on the rationale noted in the fourth to sixth paragraphs on page 3 of the previous office action. Applicants traversal is not persuasive. They do not believe that there is sufficient motivation to turn to Plueddemann to arrive at the selection of the epoxysilane as required. The Examiner disagrees. Applicants state that the reference is not relevant with respect to the present invention but it does not have to be for the combination to be proper. They indicate that there is no motivation to combine and modify the disclosures. Again, the Examiner notes that Plueddemann was deemed to be relevant to the Foscante et al. reference by virtue of the fact that it was relied upon in the examination thereof. Since Foscante et al. does not show a specific epoxysilane, one would have been motivated to turn towards references considered to be pertinent to Foscante et al. to arrive at a specific epoxysilane selection. Thus the Examiner maintains that there is, in fact, adequate motivation to combine the necessary disclosures. As an aside the Examiner notes that the epoxysilane in claims 28 and 29 are extremely common and are well known in the field of coating.

6. Claims 19, 27 to 29, 31 and 39 to 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoehn et al.

The teachings of Hoehn et al. were detailed in the previous office action. At the time the Examiner used this reference in combination but since the epoxysilane in claim 19 is much broader than that in previous claim 14, such a combination is not being made.

To summarize, Hoehn et al. teach a combination of an epoxysiloxane and an epoxy resin. The epoxysiloxane is prepared from a silanol terminal siloxane and an epoxysilane. Since column 2, lines 40 to 55. The "n" value in formula (2) overlaps with "n" value in claim 19 such that one having ordinary skill in the art would have found the polysiloxane component ii) to have been obvious. As noted in the previous office action there is nothing that excludes components ii) and iii) from being reacted before mixing

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with i). Such a composition will contain each of i) to iii), simply added and reacted in a particular order. Note that this rejection is not made against the "kit" claims since they do distinguish the composition from Hoehn et al.

For claims 27 and 28, note the top of column 4. For claim 29, note that column 2, line 54, teaches that R2 can be an epoxycycloalkyl group.

For claim 31, note column 6, line 3, which refers to adding colorants.

In applicants' response they note that Hoehn et al. is drawn to a casting composition while the claims are drawn to paints. Referring to the claimed composition as a "paint" merely indicates the future intended use of the composition. The composition per se is defined solely by its chemical make up. There is nothing in this term alone that gives the composition a physical property that would distinguish it from the composition in Hoehn et al.

7. For the following rejections using the Gasmene reference, the Examiner notes that the most of the rejection rationale is comparable to that noted in previous rejections such as the rejection of 8/23/05 and 2/27/06.

8. Claims 19, 27, 28, 30, 31, 39, 40 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Gasmene.

Applicants' rely on the phrase "consisting essentially of" in an effort to exclude the silicone polyether from the claimed composition. This is not sufficient for two different reasons.

On one hand, this issue is not even relevant since Gasmene prepare a composition that does not include the polyether siloxane. See claim 13 in Gasmene. This teaches that, when making the composition therein, two separate compositions are prepared. The first composition contains the epoxy resin, epoxysilane and siloxane components. This is an isolated, completely separate composition and it does not include the silicone polyether. Since Gasmene specifically teach aliphatic epoxy resins (column 6, line 25) and a siloxane that meets that claimed (for instance DC 3074) this one part of a two part composition anticipates these claims.

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In addition, for claim 30, please note that only container A has the "consisting essentially of" language. This allows for the silicone polyether in the container B.

The working example on column 11 prepares a composition not having a polyether siloxane. The only difference between this and the claims is that it does not indicate what epoxy resin or siloxane are being used. Again, since Gasmena teaches both an aliphatic epoxy resin and a siloxane meeting that claimed, this reference considered as a whole fully meets the instant claims.

For claims 27 and 28, see the silane specifically taught on column 3, lines 60 to 65.

On the other hand, applicants have not established that the claim language "consisting essentially of" excludes the polyether silicone in Gasmena.

The Examiner has considered the Declaration that compares the instant invention to Gasmena. Unfortunately the Examiner cannot conclude from these showings that it is the presence of the polyether siloxane per se that affects the final properties. For instance the inventive and comparative examples use different epoxy resins. Example 3 of the instant invention even uses a combination of two different epoxies. Different amounts of each components are also used. The Examiner cannot determine if any of these differences are contributing towards the different results rather than the presence of the polyether siloxane. It simply is not clear that the claims exclude a polyether siloxane because such a compound materially affects the basic and novel characteristics of the claimed invention.

The Examiner also notes that the previous Examiner, Examiner Robertson, was not persuaded by these results. This is evident from his remarks in paragraph 8 of the office action dated 2/27/06 and paragraph 8 of the office action dated 8/23/05. It is unclear why applicant believe at this time that such results would be persuasive.

9. Claims 20, 29, 32 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasmena.

For claims 20 and 32, please note that the amounts of each component set forth

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by Gasmena include ratios that fall within applicants' claimed range. Gasmena teaches that the epoxy-functional silane is added to enhance intercoat and substrate adhesion of the coating as well as to improve the flexibility of the cured coating. Col. 3, line 66 and on. The siloxane is added to impart heat and flame resistance. Col. 4, lines 55-59. The epoxy resin is added to impart film elongation, flexibility, and for cure time. Col. 6, lines 34-45. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. does not require undue experimentation).

For claims 29 and 41, the Examiner notes that patentee does not specifically teach this epoxy silane but it is within the breadth of the general formula on column 3, lines 40 to 45. The Examiner also notes that this is a very common and commercially available epoxy silane. The ordinary artisan would have found the selection of such a common epoxysilane for use in the composition of Gasmena to have been obvious, in view of the teachings therein combined with that which is well known in the art.

10. Claims 21 to 23, 33 to 35 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasmena in view of Eklund.

This rejection relies on the same rationale detailed in paragraph 5 on page 4 of the office action dated 2/27/06. As such this will not be repeated.

11. Claims 21, 22, 24, 25, 33, 34, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gasmena in view of Iwamura et al.

This rejection relies on the same rationale detailed in paragraph 6 on page 5 of the office action dated 2/27/06. As such this will not be repeated.

12. Claims 26 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest a composition as claimed, particularly one

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having the specific epoxy compound. A structure search of the epoxy compound in claims 26 and 38 yielded only one citation. This citation corresponds to applicants' priority document.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

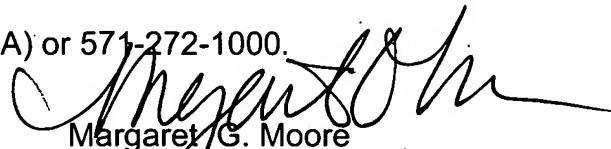
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
3/5/07